DENTIST-PATIENT INTERACTION IN PRIVATE PRACTICES IN HONG KONG

Advisor:

Dr. Edward C.M. Lo

Group 5.6:

CHEONG Hung Lei, Celine
CHIU Shin Jo
CHOW Hin Ko, Arthur
SHUM Hoi Cheung
WAN Kin Yip
YIP Kin Man, Stephen

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1. ABSTRACT

This project was an exploratory study to investigate the dentist-patient interactions during dental consultations in private dental practices in Hong Kong. The study consisted of three parts, namely a telephone survey, an interview with selected dentists, and observations of dentist-patient interactions in dental clinics. In the telephone survey, telephone numbers were randomly selected from residential directories and finally 67 recent dental service users were interviewed. The main reasons for their last dental visit were toothache and for the relief of dental symptoms. The two most commonly wanted treatments were filling and extraction but less than two-thirds of the respondents received their wanted treatment in their last dental visit. Most of the respondents' dentists had suggested treatments which the respondents had not asked for and in most cases the respondents accepted the suggestions. Having a perceived need, trust the dentist, and better aesthetics were the main reasons given by the respondents for accepting the dental treatments received and cost was the main reason for refusing a proposed treatment. A total of 42 dental consultations were observed in private dental clinics. Transactional analysis proposed by Harris was used in the observations to classify the dentist-patient interaction. It was found that "Parent-to-Child" was the most common type of dentist-patient communication. Problems in dentist-patient communication were observed in about 20% of the dental consultations and these all ended up in disagreements and conflicts. It was recommended that dentists should try to take up an 'adult' role and use Adult-to-Adult communication in a dental consultation so that the patient can express his/her thoughts and rational discussions can take place.

2. INTRODUCTION

There is a growing recognition that interaction between doctor and patient during a consultation can have considerable influence on patient satisfaction and the outcome of the consultation. The nature of the relationship between doctor and patient also plays a vital role in diagnosis and treatment decision.

In the early studies about this aspect, Parsons[1] described the doctor-patient relationship in broad terms as an asymmetrical relationship in which the doctor occupied a dominant position by virtue of his or her specialized knowledge and skill and the high status accorded to the medical profession. In a study by Byrne and Long in 1976[2] a doctor-centred consultation pattern was evident in three-quarters of the consultations.

In 1956, Szasz and Hollender[3] suggested that the type of relationship which characterized the treatment planning process depended on both the condition of the patient and the therapy considered as appropriate by the doctor, and might be different at different stages of the patient's treatment. According to their classification, there are three types of relationship between the professional care provider and the patient. The first type is termed activity-passivity where the professional is in complete active control and the patient is a passive recipient of treatment. In dentistry, this type of relationship occurs when the patient is under general anaesthetics. The second type of relationship is guidance-cooperation, when the professional guides while the patient cooperates. This is likely to be the case when a dentist treats a conscious patient. Typically, the dentist indicates the work which needs to be done and the patient agrees. The third type is termed mutual participation. It is most clearly shown in preventive care where the dentist and patient share responsibility for the maintenance of oral health[4]. There is no one type of relationship which is appropriate for all situations. In some occasions one type is appropriate while in other occasions another type is required. Problems will usually arise if there is a mismatch between the expectations of the dentist and those of the patient, where one individual is working under one approach while the other believes a different kind of relationship is called for[5].

Lefer et al[6] found that dentists always persuaded patients to receive treatments which only relied on the professionals' view of what was right for the patient, a view which was not

shared by the patient himself or herself. The factors which the dentist and the patient take into consideration in treatment planing are different. The lay theories and explanations that the patient believes are only in part directly related to the interpretation of his symptoms. Some of the questions in the patient's mind range much wider than the narrow clinical focus. Making senses of symptoms, why they occur, when they occur, what causes them to occur, what they mean for future oral health, all these are questions of a wider significance for the patient. Financial situation, aesthetics, pain, trustfulness, etc. are factors that are unrelated to the symptoms but nevertheless are what the patient would consider in deciding what treatment should be received. The focus of the dentist tends to be rather different. Because of the great influence of the biomedical approach on the clinical method of diagnosis, disease classification and treatment, the traditional focus of dental practice in clinical setting has been very narrowly defined in terms of specific biological parameters of the oral conditions. The dentist may be concerned with only a tiny segment or a particular aspect of the oral condition to the exclusion of everything else, including the background, personality, or even identity of the patient. Such misunderstanding often leads to conflicts in treatment planning. The potential conflicts arise from different interests, expectations, knowledge of lay persons and professionals, and differences in evaluation of the seriousness of disease, finance, etc.[7] Both dentist and patient may employ strategies to try to influence the course of the consultation and achieve their desired outcome through persuasion, bargaining or some non-verbal behaviour.

A number of changes are taking place now which are likely to encourage a greater participation of patients in dental procedures, which are also reflected in the increasing number of conflicts during dental consultations. In our literature review, no study about this aspect in Hong Kong was found. So we decided to carry out an exploratory study to investigate the dentist-patient interactions during dental consultations in the local private dental practices.

3. OBJECTIVES

The objectives of this study were:

1. To describe the dentist-patient interaction during a dental consultation and treatment plan building,
2. To find out the main reasons why patients accept or refuse dentist's proposed treatment,
3. To describe the influence of patient and dentist in determining the treatment delivered, and
4. To describe the dentist's perception of difficult patients and their common management strategies.

4. MATERIALS AND METHODS

Our project consisted of three parts carried out by three different methods. The first part was a telephone interview of patients using a structured questionnaire. The second part was a face-to-face interview of selected dentists and the last part was observing dentist-patient interactions in selected dental clinics.

4.1 Telephone Survey

4.1.1 Study population

The target study population of the telephone survey was Chinese adults who had visited a private dentist in Hong Kong within a year. People who had only attended the dental hospital, government and organisation dental clinics were excluded.

4.1.2 Sampling method

Telephone numbers were randomly drawn from the 1992 residential telephone directories published by the Hong Kong Telephone Company. Telephone calls were made to contact the households. There was a self-introduction by the interviewer and the purpose of the study was explained to the person who answered the call. Then he/she was asked to pass on

the telephone to a member in the household who had visited a private dentist within a year if he/she had not done so. A telephone call was regarded as unsuccessful if the telephone number was cancelled, if no one answered the call, if no one in the household had visited a private dentist recently, or if the household members did not want to be interviewed. The interviews were usually carried out in evenings because it would be easier to contact the households. Each member of our group was responsible for completing 12 successful interviews.

4.1.3 The interview

A successful telephone interview took about two minutes to complete. A structured questionnaire was used in the telephone interview and the interviewer did not guide the respondent in answering the questions in order to avoid bias. The interview was conducted in colloquial Cantonese. The questionnaire used is attached to this report as appendix 1.

A pilot test of the questionnaire was conducted on patients in the waiting areas of the Prince Philip Dental Hospital. The appropriateness of the questions was evaluated and the wordings were amended after the pilot test. The final questionnaire consisted of nine questions about the following six areas:

1. The respondent's chief complaint in the last dental visit
2. What treatments did the respondent want
3. Other treatments, if any, suggested by the dentist
4. Treatments received by the respondent and reasons why
5. Treatments rejected by the respondent and reasons why
6. Background information of the respondent

4.2 Interview with dentists

4.2.1 Selection of dentist

In order to gain more insight into how experienced dentists manage new walk-in patients, i.e. patients who are not specially referred to the dentist but just come into the dental clinic from the street, only general dental practitioners with at least five years of practice experience and who were working in a street-level dental clinic were selected. In order to remain impartial in the interviews and later observations, dentists who were part-time teachers in the Faculty or whom we knew were excluded. Finally eight dentists were selected and invited to be interviewed by our project adviser. They were all local graduates.

4.2.2 Interview

Before meeting the selected dentists, meetings were held among our group members to discuss what information should be collected and to draw up guidelines for the interview. Usually two members of our group and our teacher adviser attended an interview held in the dentist's clinic or in a restaurant. The interview was conducted in a relaxed atmosphere without tape-recording in the form of a friendly chat. During the interview, the interviewers asked questions according to the guidelines but they were free to decide the order of the questions and the wordings. The dentist was invited to talk about his/her experiences with different types of patients and his/her common management strategies. Additional questions might be asked according to the dentist's answers. As the interview was not tape-recorded, the interviewers had to write down the information immediately after the interview. The information collected from all the interviews were discussed by the whole group and were summarized.

4.3 Observations in dental clinics

Transactional analysis proposed by Harris[8] was used in this study to describe the roles of the dentist and the patient in a dental consultation. According to Harris, personality can be divided into three parts/states: Parent, Adult and Child. Observations have supported the assumption that these three states exist in all people. Changes from one state to another are apparent in manner, appearance, words and gestures. These states of being are not just roles but psychological realities. A person can be in a "child state" when he/she laughs, cries, shows his/her feelings or asks for help. The same person is in an "adult state" when he/she speaks logically and matter-of-factly and can change to a "parent state" when he/she helps or reprimands other people.

In general, "Parent" is always authoritative, guarding against dangers, and sometimes ordering and commanding. Unlike the "Parent", "Child" is emotional, irrational, has little control of the environment and needs protection. During helpless and fearful time, like a nervous patient sitting on the dental chair, the child state is easily activated. And lastly, "Adult" is the one based on reasoning and logical thinking. The adult state is the only part of a person's personality that can change attitudes and behaviours.

When communications are analyzed with the aid of a Parent-Adult-Child (P-A-C) transactional analysis diagram, there are basically two types communications : parallel and crossed. When the communication can be represented by parallel lines in the P-A-C diagram (Fig. 1), the two persons take up reciprocal or complementary roles and can go on indefinitely without problems. However, if the communication is shown as crossed lines in the P-A-C diagram (Fig. 2), there will be conflicts between the roles taken up by the two persons concerned and effective communication will stop[8].

In order to avoid subjective assessment by an individual observer, two members of our group worked as a team. Before carrying out the observations, training exercises were conducted to calibrate the observers. Guidelines were drawn up to assist the observers in identifying actions and responses which may be used to classify a person as being in a Parent, Adult or Child state (Appendix 2). These included not only the verbal but also the non-verbal communication such as body gestures and facial expressions. A pilot test was carried out

by observing the work of a Junior Hospital Dental Officer in the Prince Philip Dental Hospital and the guidelines were discussed and refined after the test.

Visits were then made to the dental clinics of the dentists whom we had interviewed in this project. With the consent of the dentist, the interactions between the dentist and his patients were observed and recorded on a specially designed record form (Appendix 3). The observers stayed in the reception counter or in a small room next to the surgery room where they could hear the conversations and see clearly the actions of the dentist and his patients. No question was asked and the observers did not talk to any person in the clinic during the observation. The patients were not informed of the presence of the observers. Thus, there should be minimal interruption of the normal process of the dental consultation.

As the roles played by the dentist and the patient may change during a consultation, in this study the consultation was divided into three phases. Phase 1 began when the patient came into the surgery room and ended when the dentist started to perform clinical examination. Phase 2 was the period when clinical examination was carried out. Phase 3 was the period during which the dentist and the patient discussed the clinical findings and the proposed treatment plan.

The communication and interaction between the dentist and the patient in the different phases of the consultation were analyzed and the overall general impression of their roles, as agreed by both observers, were recorded. In addition, disagreements in the proposed treatment plan, the reasons for the disagreement and the method used by the dentist to reconcile the disagreement were also recorded.

PARALLEL COMMUNICATION
(NO CONFLICTS)

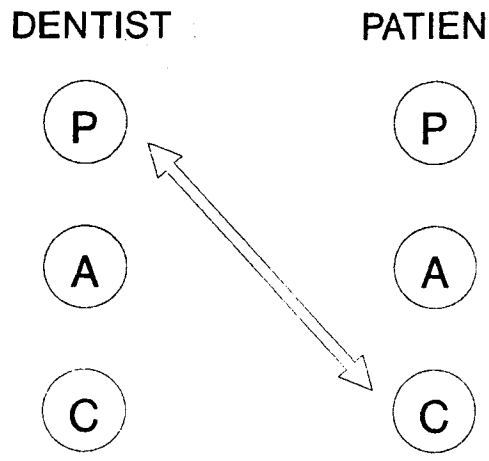

FIG. 1

CROSSED COMMUNICATION
(CONFLICTS ARISE)

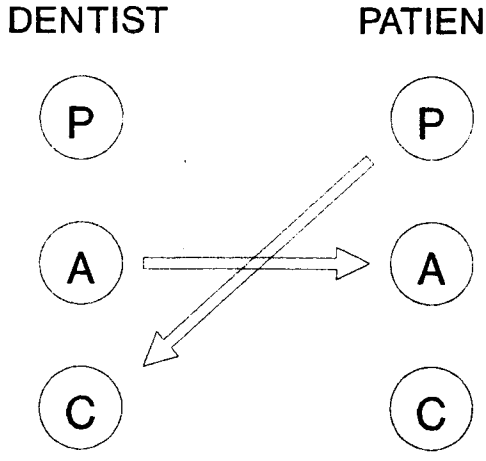

FIG. 2

5. RESULTS

5.1 Telephone survey

A total of 723 telephone calls were made but only 67 (9%) of them resulted in a completed interview. The main reasons for failures were no one answered the call or no one in the household had visited a private dentist within a year. Very few refusals were encountered.

Table 1. The general profile of the telephone survey respondents.

		N	%
Age	below 30	31	46
	30-60	31	46
	above 60	5	8
Education level	Primary or below	14	20
	Secondary	24	36
	Post-secondary	29	44
Sex	Male	38	57
	Female	29	43
Household income	Below $20,000	33	49
	$20,000 or above	34	51
		67	100

It can be seen from Table 1 that the respondents were from various age and education groups, though relatively few elderly were interviewed and quite a number had received post-secondary education. There were more males in the sample. About half of the respondents had a household income of below $20,000 and the other half above.

More than half of the respondents last visited a dentist for the relief of toothache or symptoms like dental abscess, fractured tooth and painful gums (Table 2). About one-fifth went for a scaling or for non-symptomatic treatment like fillings in the absence of pain. Only 10% of the respondents went for a dental check-up.

Table 2. The chief complaint or treatment sought at the last dental visit.

	N	%
Toothache	25	37
Extraction or symptomatic treatment	12	18
Scaling or non-symptomatic treatment	12	18
Bridges or denture	7	10
Check-up	7	10
Aesthetic problems	4	7
	67	100

Table 3. Treatments wanted by the respondents and treatments finally received.

Treatment item	No. of people wanted		No. of people finally received	% wanted finally received
Filling	17	(25%)	8	47%
Extraction	15	(22%)	10	67%
Scaling	14	(21%)	14	100%
Denture	7	(10%)	6	86%
Crown or Bridge	5	(8%)	4	80%
Others	5	(8%)	2	40%
Endodontics	0	(0%)	0	0%
Advance Perio.	0	(0%)	0	0%

In can be seen from Table 3 that 17 respondents, i.e. 25% of the total sample of 67 subjects, wanted to have a filling at their last dental visit. However, only 8 of them, i.e. 47% of those who wanted, finally received a filling. In contrast, scaling was received by all of the 14 respondents who wanted to have their teeth scaled. Most of the respondents who wanted prosthesis also had the treatment done. This was the case for only two-thirds of the respondents who wanted extractions. The treatment items under the "Others" category included bleaching, implants, orthodontics, and veneer facings. None of the respondents had requested for endodontic treatment or advanced periodontal treatment. Ten respondents did not want any specific treatment at their last dental visit or could not remember.

Table 4. Treatments suggested by the dentist and treatments finally received.

Treatment item	No. of suggestions	No. of people finally received	% suggestions finally received
Scaling	36 (54%)	26	72%
Filling	20 (30%)	13	65%
Extraction	17 (25%)	14	82%
Endodontics	12 (18%)	9	75%
Crown or Bridge	9 (13%)	5	56%
Denture	5 (8%)	4	80%
Advance Perio.	4 (6%)	4	100%
Others	4 (6%)	3	75%

It can be seen from Table 4 that scaling was suggested by the respondent's dentist in 36 cases, i.e. 54% of the total sample, even though the subjects had not asked for it in their last dental visit. Out of these 36 respondents, 72% of them or 26 in numbers finally received a scaling. The next common treatment suggested was filling and 65% of the dentists making this suggestion were successful in persuading the respondents to have this treatment done. The acceptance rates for extractions, endodontic treatment, dentures, and advanced periodontal therapy were all very high, at 75% or above. The acceptance rate for crown or bridge was lower but still was over 50%. Only nine respondents did not received any suggestions from their dentists.

Table 5. Treatments received by the respondents and their main reasons for acceptance.

Treatment	Perceived need	Trust dentist	Improve aesthetics	Improve function	Relief pain	Others	Total
Scaling	19	10	4	1	1	1	36
Extraction	5	6	-	-	7	2	20
Filling	10	4	2	-	1	-	17
Denture	1	1	5	2	-	-	9
Endodontics	2	4	-	1	1	-	8
Crown or Bridge	1	1	3	1	-	-	6
Advanced perio.	1	1	1	-	-	-	3
Others	2	3	4	-	-	-	9
Total	41	30	19	5	10	3	108

A total of 108 treatment items were received by the respondents in their last dental visit (Table 5). Having a perceived need, trust the dentist, and to improve aesthetics were the main reasons given by the respondents as to why they agreed to have the treatment done. Relief of pain was an important consideration in deciding whether to have a tooth extracted.

Table 6. Treatments refused by the respondents and their main reasons for refusal.

Treatment	Expensive	No need	Pain	Other	Total
Crown or Bridge	4	-	-	-	4
Extraction	1	-	2	1	4
Filling	1	1	-	1	3
Endodontics	2	-	-	1	3
Scaling	-	1	1	-	2
Others	1	1	-	-	2
Total	9	3	3	3	18

Only 18 treatment items suggested by the dentists were refused by the respondents in their last dental visit (Table 6). Treatment charge being too expensive was the main reason for refusal. This was especially the case for the more expensive treatment items like crown, bridge and endodontics.

5.2 Dentist interviews

Eight experienced dentists were interviewed in this project. The easy-to-manage patients as perceived by the dentists are listed in Table 7 alongside with the reasons given by the dentists. These included the wealthy patients, referred patients, patients with good past dental experience and the young educated people. On the other hand, there were patients whom the dentists said were difficult to manage (Table 8). These included patients with medical or psychiatric problems, failed cases, those with bad dental experience, housewives, children and elderly.

Table 7. Types of patients whom the dentists thought were easy to manage and the reasons why.

Easy-to-manage patients	Reasons
1. Wealthy patients	More flexible when formulating the treatment plan because there are more affordable treatment alternatives
2. Referred patients	More confident in the dentist
3 Young educated patients	Accept explanations more readily and more communicable
4. Those with good past experience	More confident in dentistry and less fear

Table 8. Types of patients whom the dentists thought were difficult to manage and the reasons why.

Difficult patients	Reasons
1. Psychiatric problem	Emotional, difficult to communication
2. Housewives	Very concerned about money and like to bargain
3. Children	Usually have imagined fear and uncooperative
4. Elderly	Low tolerance to dental treatment and low adaptability Financial problems
5. Those with bad past experience	Difficult to convince the patient to accept appropriate treatments
6. Failed cases referred by other dentists	May have very high expectation Tolerance is low as last treatment has failed
7. Problems with medical history	Medical emergency may occur in the surgery

Table 9. Types of treatments most commonly refused by patients and reasons why.

Most commonly refused treatment		Reasons
1.	Extraction	Pain
2.	Minor oral surgery e.g. third molar extraction	Uncomfortable
3.	Expensive treatment e.g. Crown & bridge	Financial problems

Treatment most commonly refused by patients included extractions and minor oral surgery because patients were afraid of possible pain and discomfort after the treatment (Table 9) and also expensive treatment items due to financial considerations.

5.3 Observations in dental clinics

Ten days were spent in the dental clinics and 42 dental consultations were observed and recorded in this study. About half of the patients were males and the vast majority of them were either 30-60 years of age or younger (Table 10).

Table 10. The age and sex distribution of the patients observed.

		N	%
Age	below 30	20	46
	30-60	21	49
	above 60	2	5
Sex	Male	22	51
	Female	21	49
		43	100

From the patient's point of view most of the dentist's greetings were warm (93%) and active (88%), i.e. the dentist was the person who initiated the greeting. The main activity during phase 1 (from when the patient met the dentist to just before clinical examination) was patient informing the dentist about his or her problem. Two main types of dentist-patient communication were observed and these were Parent-to-Child (42%) and Adult-to-Adult (38%) communication (Fig. 3). In these communications, the two persons involved took up reciprocal roles and there was no communication problem. In 20% of the cases, the dentist and the patient took up incompatible roles and in these situations communication problems arose. Four main types of problematic situations, each accounting for about 5% of the cases, were observed and they were described below.

1. Both the dentist and the patient wanted to dominate the situation and acted in a parent role using a Parent-to-Child communication but the other person did not response in a Child-to-Parent manner.

2. The dentist wanted to be the authoritative person and used Parent-to-Child communication but the patient wanted to be equal and used an Adult-to-Adult communication.

3. The dentist wanted to talk about facts and reasons and used an Adult-to-Adult communication but the patient wanted to control the conversation and used a Parent-to-Child communication.

4. The dentist wanted to establish an equal relationship using an Adult-to-Adult communication but the patient took up an inferior passive role and responded in a Child-to-Parent manner.

During phase 2 (from the start of clinical examination to just before discussion of treatment plan), the dentist usually took control of the situation and in 73% of the cases his communication was mainly of the Parent-to-Child type (Fig. 4). The percentage of Adult-to-Adult communication decreased sharply to 8%. However, the amount of problematic communications in which the two sides did not take up reciprocal roles remained at 20%.

ROLES OF THE DENTIST AND PATIENT IN PHASE 1

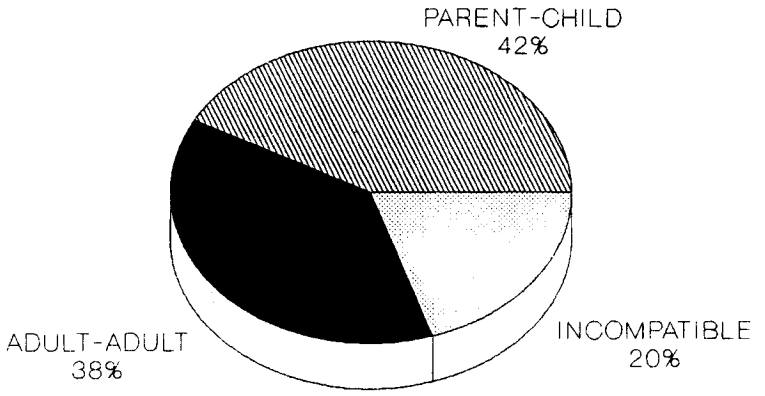

FIG. 3

ROLES OF THE DENTIST AND PATIENT IN PHASE 2

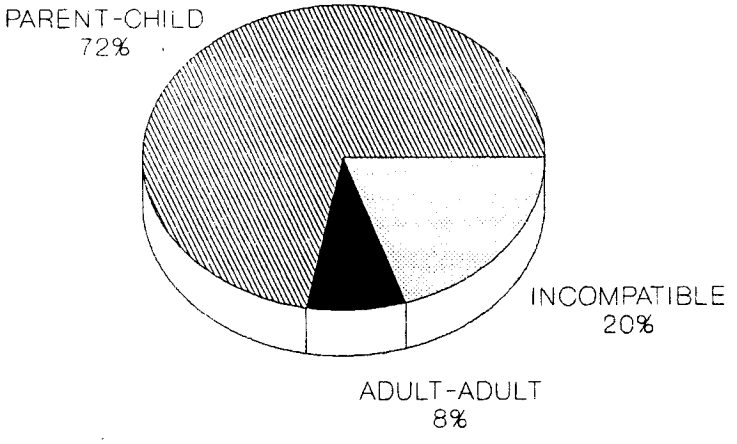

FIG. 4

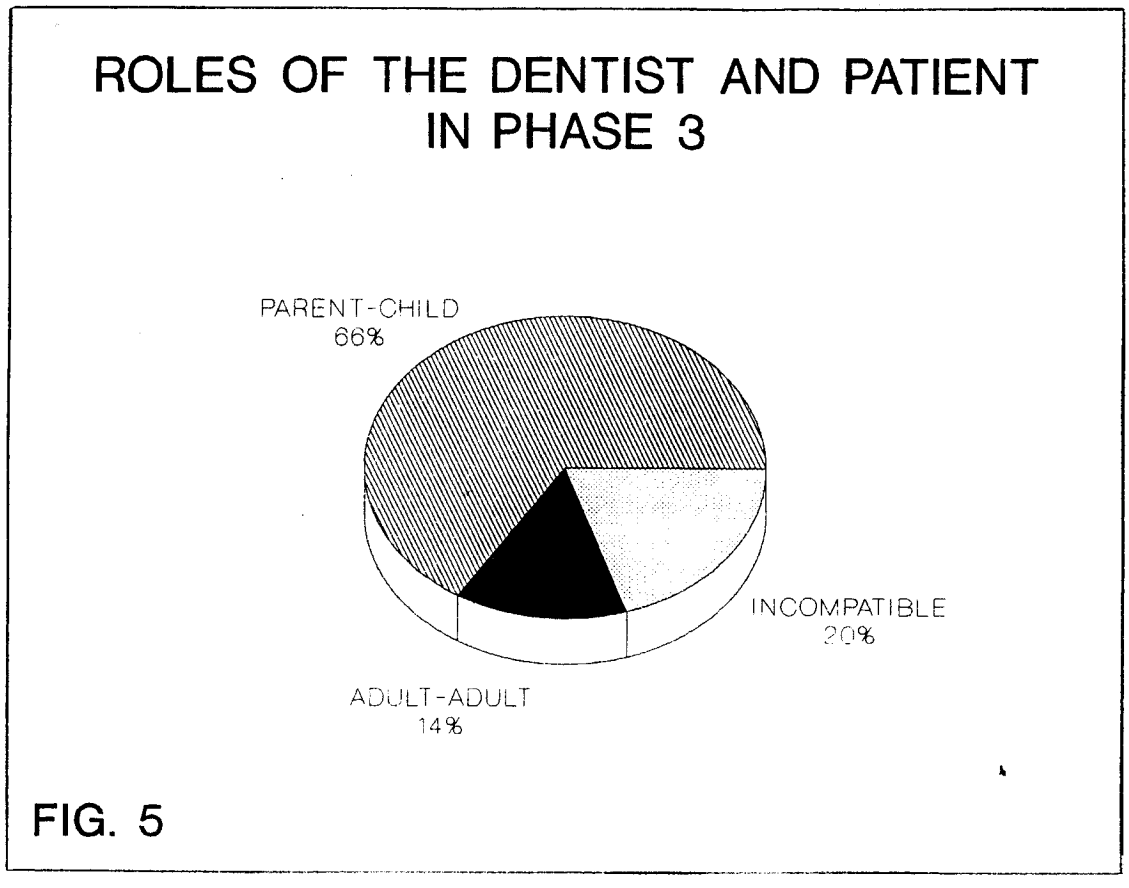

FIG. 5

In the last phase of the consultation when the dentist and the patient discussed the proposed treatment plan, in most cases (66%) the setting was still dominated by the dentist who continued to use a Parent-to-Child communication (Fig. 5). In some cases, the dentist reverted to a more equal relationship and an Adult-to-Adult communication was established in 14% of the cases. It is worth noting that problems with the communication still existed in 20% of the cases.

Eight disagreements in the proposed treatments occurred during our observations. Four disagreements were on extraction and the patients' main reason for rejecting the dentist's proposal was either the tooth was symptomless or the patient wanted to keep the tooth. Two disagreements were on endodontic treatment and the patient's reasons for refusal were high cost and previous bad experience. The other two rejected treatment items were a denture and a restoration, both because of the cost. Problematic communications were found in all these disagreement cases, the two most common being the Parent-vs-Parent and Adult-to-Parent type.

The main method used by the dentists to reconcile these disagreement was further explanation of facts. From our observations, apart from explaining the facts to the patient, the dentist also employed other methods such as proposing alternative treatments, threatening the patient and be prepared to offer compromised treatment. When the observers talked to the dentists afterwards, all of them said that they would not force the patient to accept the proposed treatment. They would rather do some simple treatments first, after which the patient might build up confidence in the dentist, and then they would try to suggest the advanced treatments. Some dentists liked to ask their dental surgery assistants to talk to the patient. They said sometimes the patient trusted the assistant more, especially concerning treatment charges. Finally they would ask the patient to think it over and they would not finalise the treatment plan in the same visit.

6. DISCUSSION

6.1 Telephone survey

The background of the survey respondents was different from that of the general population found in the 1991 Census[9]. For example 38% of the adult population in Hong Kong had attained no more than primary school level of education and only 16% had attained post-secondary education. In our sample of respondents the respective percentages were 20% and 44%. The age distribution of the sample was also skewed towards the younger groups. These differences may be due to the fact that the respondents needed to have visited a private dentist in Hong Kong within a year. Findings of a recent oral health survey in Hong Kong[10] showed that proportionally more younger and well-educated persons in the population were recent dental service users, especially of the private sector.

The main reasons given by the respondents for their last dental visit were toothache and for the relief of symptomatic problems while only 10% of them went for a check-up. This was in agreement with the findings of a previous oral health survey[11]. Thus it seems that the patients' attitudes towards dental care were mainly treatment-oriented rather than prevention-oriented. These attitudes would certainly have an influence on the dentist-patient relationship and the communication during a dental consultation.

Results of the telephone survey showed that most respondents had their own treatment plan in mind before they visited a dentist. Filling, extraction and scaling accounted for about 70% of the treatments wanted. Since the dentist might not agree with the patient, the treatment delivered might be different from what the patient had originally wanted. This was reported in a number of the interviews. Only about half to two-thirds of the respondents who wanted a filling or an extraction had the treatment done (Table 3). Scaling was the only treatment that 100% of the requests were entertained.

In most cases, the respondent's dentist had suggested treatments that the respondents had not asked for and most respondents accepted the suggestions (Table 4). The respondents accepted these treatments mainly because they also agreed with the dentist finally that there was a need or that they trust the dentist (Table 5). Endodontics and advanced periodontal treatments (involving root-planing or surgery) were two treatment items which none of the respondents had asked for but nevertheless very high acceptance rates (75% to 100%) were found when these treatments were suggested by the dentist. This may indicate that : (1) some respondents did not know the serious consequences of dental diseases and only sought treatment at a very late stage, (2) some of them thought that a tooth needed to be extracted when it caused problems, (3) dentists could persuade people to receive advanced treatments, (4) some respondents wanted to retain their teeth if possible.

Although results of this study showed that a dentist could persuade a patient to receive treatments which were rather different from what he/she wanted, this was not always successful. In persuading a patient, the dentist should bear in mind that the most important factors leading to the acceptance of treatment are whether the patient agrees that there is such a need, whether the patient trusts the dentist, and whether the treatment can improve aesthetics and function or not. This is especially the case for expensive treatments because cost was the most important reason found in this study for rejecting a proposed treatment.

6.2 Observations in dental clinics

The observations in the dental clinics concentrated mainly on the communications between the dentist and the patient. We were aware that communications were taking place all the time throughout the consultation and the people involved could not non-communicate. Even if they were completely silent and did not move, they were sending out massages. Thus both the verbal communication expressed in words and the non-verbal communication expressed through changes in postures, gestures, and body movements were noticed.

Transactional analysis as proposed by the American psychologist T.A. Harris[8] was used in this project to classify the type of dentist-patient communication. The observers had to decide as to which part of the person's personality state, Parent, Adult or Child, was activated during a particular phase of the consultation. Since this decision could be quite subjective, efforts were made to improve the reliability of the observations. Before conducting the observations the whole group held a number of meetings to discuss how to perform the observations and guidelines in classifying the three states were prepared. Pilot tests were conducted and the guidelines were refined. When there was disagreement between the two observers on how to classify the observation, the observers would discuss together immediately and try to reach an agreement, and if this was still not possible, all information including the dialogues would be recorded down. The observation would be discussed by the whole group later.

Over 90% of the dentist's greetings observed were warm and active. This should be the case as patients can be considered as the dentist's customers if we think of dentistry as a health service business. But one may wonder why in 10% of the cases the greeting was cold and passive. This may be because some patients were perceived by the dentists as problematic, e.g. difficult to communicate and always complaining. There were also patients who came to continue a course of treatment and the dentist thought that there was no need to say anything.

There was no communication problems in 80% of the cases in Phase 1 of the dental consultation. Parent-to-Child and Adult-to-Adult communications were found in 42% and 38% of the cases respectively. This means that the dentist and the patient could find a

complementary role in the interaction. In Parent-Child interactions, usually the patient was nervous and asked for help, and the dentist automatically accepted the role of being the parent. In this type of dentist-centred consultation, the dentist was characterised by using a directive approach, with the use of tightly controlled interviewing methods aimed at reaching a diagnosis as quickly as possible, and providing little opportunities for the patient to discuss his/her symptoms and worries. There are at least two reasons why this type of interaction is so common. Firstly, a dentist usually has a feeling that he/she should be the person in charge and tends to take up the role of a parent who protects the patient and dominates the consultation. The dentist is inclined to use words like "Don't worry, I will take care of you" during the consultation. At the same time a patient often feels like a child in the dental chair as he/she knows little about how to solve his/her problem and has to appeal to the dentist. Though this is no communication problem, this type of interaction is not very good and is inappropriate if one agrees that a patient should adopt the attitudes or behaviours of a mature adult. The Parent-Child relationship can only reinforce already existing viewpoints. Only through Adult-to-Adult communications can changes in attitudes be made because Adult is the only part of a person's personality that is able to change things in the total personality.

Communication problems and conflicts occurred in 20% of the cases observed, in which the dentist and the patient either took up an inappropriate role or treated his/her partner in a wrong role. Communication was blocked and it was difficult for them to go on to Phases 2 and 3 without disagreement or even quarrel. One obvious example was that both the dentist and patient wanted to control the situation and both took up a parent role and treated the other as a child.

In Phase 2 of the consultation, there was a dramatic rise in the amount of Parent-to-Child communication and a corresponding drop in Adult-Adult interaction. This is understandable because this phase covered the whole period of clinical examination in which the patient had to open his/her mouth. It is obvious that the patient was unable or difficult to talk during this phase and moreover the patient was lying down and was under the control of the dentist. On the other hand, the dentist almost totally controlled the situation. So it is natural that this type of dentist-patient relationship dominates this phase of the consultation.

It seems from our observations that the roles taken up in Phase 2 of the consultation were carried on in Phase 3 during which the dentist and the patient discussed the clinical findings and treatment plan. During treatment planning, the patient should have a chance to express his/her thoughts since he/she should be concern with his/her own treatment and decide what is most appropriate for himself/herself. The discussion should be based on facts and logic, and this can only be attained by using Adult-to-Adult communication. However, only in a few cases did we observe the dentist changed from a Parent to an Adult role in order to allow for this type of communication. Most of the communications observed in this phase were still of the Parent-to-Child type showing that the dentist wanted to dominate the discussion.

As found in the telephone survey, most patients had their own treatment plan in mind and dentists frequently suggested treatments that the patient had not thought of. There should be logical discussions during treatment planning to reconcile these differences. Moreover, confidence in the dentist was reported by both the telephone survey respondents and the dentists interviewed to be an important factor in deciding whether the patient would accept a proposed treatment or not. It is, therefore, very important for a dentist to build up confidence in his/her patients. Besides good technical skills, confidence is built on good communication. It would be very difficult, if not impossible, for a dentist to build up confidence in his/her patient if the communication is poor. A good communication can help a dentist to understand the problems and worries of his/her patient which is essential in good treatment planning and to increase patient's satisfaction with the dental services received. For example, it is very important to know the expectation of the patient and to explain clearly to the patient the proposed treatments and the prognosis in order to prevent arguments and complaints later. All these can only be achieved through an Adult-to-Adult communication.

The overall finding of this study was similar to those found in earlier studies reviewed in the introduction section. Thus what Parsons[1] described in 1951 as an asymmetrical relationship in which the doctor occupied the dominant position is still the most common dentist-patient relationship in Hong Kong in 1993. If it is agreed that Adult-to-Adult communication is the ideal type in a dental consultation, then more education for both the dental profession and the public is required so that they can both adopt a mature adult role.

7. CONCLUSIONS

The results of this project should be interpreted with great care, especially if some inferences were to be made, due the following limitations. This project can only be regarded as an exploratory investigation into a mainly unknown area of dentistry in Hong Kong. The numbers of telephone survey respondents, dentists interviewed and dental consultations observed were relatively small. Moreover, the selection of dental clinics was not random.

The main findings of this study were:

1. Among the telephone survey respondents, the main reasons for having a dental visit were toothache and for the relief of dental symptoms.

2. The two most commonly wanted treatments were filling and extraction and less than two-thirds of the respondents received their wanted treatment in their last dental visit.

3. Most of the respondents' dentists had suggested treatments which the respondents had not asked for and in most cases the respondents accepted the suggestions.

4. Having a perceived need, trust the dentist, and better aesthetics were the main reasons given by the respondents for accepting the dental treatments received and cost was the main reason for refusing a proposed treatment.

5. Parent-to-Child was the most common type of dentist-patient communication observed during the dental consultations.

6. Problems in dentist-patient communication were observed in about 20% of the dental consultations and these all ended up in disagreements and conflicts.

8. RECOMMENDATIONS

1. Dentists should do their best to increase their patient's confidence through good communications as trusting the dentist is a very important factor for the patient in accepting a treatment.

2. Dentists should try to take up an "Adult" role and use Adult-to-Adult communication in a dental consultation so that their patient can express their thoughts and rational discussions can take place.

3. Training programme in communication skill should be incorporated in the dental curriculum, and there should be opportunities for dental students to observe dentist-patient interactions in private dental practices.

4. Further researches in dentist-patient relationship should be conducted in Hong Kong.

9. ACKNOWLEDGEMENTS

We would like to express our sincere appreciation and gratitude to:

1. Dr. E.C.M. Lo, our adviser, for his guidance and advice throughout the project.
2. The dentists who kindly allowed us to visit their clinics and/or participated in our interviews:
   - Dr. CHAN Kwok Keung
   - Dr. HO Chi Wai
   - Dr. LEE Yuk Ching
   - Dr. LAW Chun Tao
   - Dr. KAN Kwok Hung
   - Dr. SO Hon Ching
   - Dr. WANG Shi Chi
   - Dr. YEUNG Fee Tang
3. Ms. Josephine Yuen and Ms. Mimi Lui for their indispensable secretarial assistance.

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No : _____ 1-3

BDS 4 COMMUNITY HEALTH PROJECT 1993

DENTIST-PATIENT INTERACTION (GROUP 4.6)

Patient Questionnaire

1. What was your chief complain in the last dental visit ?

____ 1. Toothache
____ 2. Want extraction or symptomatic treatment
____ 3. Want scaling or other non-symptomatic treatment
____ 4. Want bridge or denture treatment
____ 5. Check-up
____ 6. Others, _____ 4

2. What treatment did you want?

____ 0. No treatment wanted or could not remember
____ 1. Filling
____ 2. Extraction
____ 3. Scaling
____ 4. Bridge
____ 5. Denture
____ 6. Endodontics
____ 7. Advance periodontics
____ 8. Others, _____ 5-9

3. What other treatment did the dentist suggest?

____ 0. No treatment suggested or could not remember
____ 1. Filling
____ 2. Extraction
____ 3. Scaling
____ 4. Bridge
____ 5. Denture
____ 6. Endodontics
____ 7. Advance periodontics
____ 8. Others, _____ 10-14

4. Treatment finally received :

Item No.	Main reason	Other reasons	
_____	_____	_____	15-18
_____	_____	_____	19-22
_____	_____	_____	23-26
_____	_____	_____	27-30
_____	_____	_____	31-34

5. Treatment rejected :

Item No.	Main reason	Other reasons	
_____	_____	_____	35-38
_____	_____	_____	39-42
_____	_____	_____	43-46
_____	_____	_____	47-50
_____	_____	_____	51-54

6. Education level of the subject is :

____ 1. Primary level or below
____ 2. Secondary
____ 3. Post-secondary 55

7. Age of the subject is :

_____ years old 56-57

8. Sex of the subject is :

____ 1. Male
____ 2. Female 58

9. Average monthly household income is :

____ 1. $20,000 or above
____ 2. Below $20,000 59

Guidelines for clinic observations

1. The three main states/roles in the classification are "Parent", "Adult" and "Child"

2. The classification is not just by the words said by the dentist and the patient but non-verbal communications such as tone of voice, body gestures and facial expressions should also be taken into account.

3. The followings may suggest that the person is acting as a "Parent" :

   a. Physical acts like pointing index finger, head-wagging, horrified look, and arms folded across the chest ;

   b. Words like "always", "never", "you should" and "you ought to" ;

   c. Use of evaluative words, whether critical or supportive, and making judgements of another.

4. The followings may suggest that the person is acting as an "Adult" :

   a. Active listening with continued movement of the face and the body, and with eyes blinking every three to five seconds ;

   b. The basic vocabulary includes words like "why", "what", "where", "when", "who" and "how" ;

   c. Words like "I think", "I see", "In my opinion", "comparative", "true", "false", "probable" and "possible".

5. The followings may suggest that the person is acting as a "Child" :

   a. Physical expressions such as tears, quivering lips, pouting, rolling eyes, nail biting, laughter, and use of high-pitched voice ;

   b. Words like "I wish", "I want" and "I guess".

No : _____ 1-3

BDS 4 COMMUNITY HEALTH PROJECT 1993

DENTIST-PATIENT INTERACTION (GROUP 4.6)

Observation record form

Patient background

Sex : 4 ____ 1. Male
____ 2. Female

Age : 5 ____ 1. Below 30
____ 2. 30-60
____ 3. Above 60

Phase 1 (When patient met the dentist --> before examination)

1. From the patient's point of view, the dentist's greeting was :

6-7 ____ 1. Active ____ 1. Warm
____ 2. Passive ____ 2. Cold

2. When the patient informed the dentist about his/her problem, their roles were :

8-9

Dentist :		Patient :	
	____ 1. Strict parent		____ 1. Frightened child
	____ 2. Caring parent		____ 2. Naughty child
	____ 3. Mature adult		____ 3. Mature adult
	____ 4. Naughty child		____ 4. Caring parent
	____ 5. Frightened child		____ 5. Strict parent

Remarks : _____

Phase 2 (Examination --> treatment plan building)

3. During medical history taking and examination, their roles were :

10-11

Dentist :		Patient :	
	____ 1. Strict parent		____ 1. Frightened child
	____ 2. Caring parent		____ 2. Naughty child
	____ 3. Mature adult		____ 3. Mature adult
	____ 4. Naughty child		____ 4. Caring parent
	____ 5. Frightened child		____ 5. Strict parent

Remarks : _____

4. When they discussed the proposed treatment plan, their roles were :

13-14

Dentist :		Patient :	
____	1. Strict parent	____	1. Frightened child
____	2. Caring parent	____	2. Naughty child
____	3. Mature adult	____	3. Mature adult
____	4. Naughty child	____	4. Caring parent
____	5. Frightened child	____	5. Strict parent

Remarks : _____

5. Were there any disagreements on the proposed treatments ?

15

____ 1. Yes (Goto Q6)
____ 2. No (End of observation)

6. Dentist's main way to reconcile this disagreement :

16

____ 1. Explain facts
____ 2. Bargaining (charge)
____ 3. Propose an alternative or a comprised treatment
____ 4. Threatening
____ 5. Flattering
____ 6. Accept patient's counter-proposal
____ 7. Others, _____

7. Items with disagreement :

	Item	Main reason	Other reasons
17-20	_____	_____	_____
21-24	_____	_____	_____
25-28	_____	_____	_____
29-32	_____	_____	_____
33-36	_____	_____	_____

Remarks: _____